

## **STIC Biotechnology Systems Branch**

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The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/589,594  
Source: JFWP  
Date Processed by STIC: 8/28/06

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

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**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

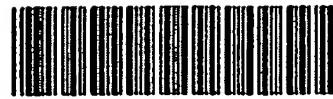
Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. **EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>) , EFS Submission User Manual - ePAVE)**
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Revised 01/10/06



IFWP

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION:** US/10/589,594

**DATE:** 08/28/2006  
**TIME:** 10:43:27

**Input Set :** A:\082368-008900US.txt  
**Output Set:** N:\CRF4\08282006\J589594.raw

4 <110> APPLICANT: Nakamura, Yusuke  
5 Furukawa, Yoichi  
7 <120> TITLE OF INVENTION: METHOD FOR DIAGNOSING COLORECTAL CANCERS  
10 <130> FILE REFERENCE: 082368-008900US  
!--> 12 <140> CURRENT APPLICATION NUMBER: US/10/589,594  
!--> 12 <141> CURRENT FILING DATE: 2006-08-15  
12 <150> PRIOR APPLICATION NUMBER: PCT/JP2004/002145  
13 <151> PRIOR FILING DATE: 2004-02-24  
15 <160> NUMBER OF SEQ ID NOS: 23  
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 2624  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Homo sapiens  
24 <220> FEATURE:  
25 <221> NAME/KEY: CDS  
26 <222> LOCATION: (294)...(1688)  
28 <400> SEQUENCE: 1  
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30 gcgaccgcgg agggtggcga gggggggcca ggacccgcag cccccggggcc gggccgggtcc 120  
31 ggaccgcag ggagggcagg tcagtggca gatcgcttc gcgggattca atctctgccc 180  
32 gctctgataa cagtccttt ccctggcgct cacttcgtgc ctggcacccg gctgggcgcc 240  
33 tcaagaccgt tgctcttcg atcgcttctt tggacttggc gaccatttca gag atg 296  
34 Met  
35 1  
37 tct tcc aga agt acc aaa gat tta att aaa agt aag tgg gga tcg aag 344  
38 Ser Ser Arg Ser Thr Lys Asp Leu Ile Lys Ser Lys Trp Gly Ser Lys  
39 5 10 15  
41 cct agt aac tcc aaa tcc gaa act aca tta gaa aaa tta aag gga gaa 392  
42 Pro Ser Asn Ser Lys Ser Glu Thr Thr Leu Glu Lys Leu Lys Gly Glu  
43 20 25 30  
45 att gca cac tta aag aca tca gtg gat gaa atc aca agt ggg aaa gga 440  
46 Ile Ala His Leu Lys Thr Ser Val Asp Glu Ile Thr Ser Gly Lys Gly  
47 35 40 45  
49 aag ctg act gat aaa gag aga cac aga ctt ttg gag aaa att cga gtc 488  
50 Lys Leu Thr Asp Lys Glu Arg His Arg Leu Leu Glu Lys Ile Arg Val  
51 50 55 60 65  
53 ctt gag gct gag aag gag aat gct tat caa ctc aca gag aag gac 536  
54 Leu Glu Ala Glu Lys Glu Lys Asn Ala Tyr Gln Leu Thr Glu Lys Asp  
55 70 75 80  
57 aaa gaa ata cag cga ctg aga gac caa ctg aag gcc aga tat agt act 584  
58 Lys Glu Ile Gln Arg Leu Arg Asp Gln Leu Lys Ala Arg Tyr Ser Thr  
59 85 90 95

*See p. 8*  
**Does Not Comply**  
**Corrected Diskette Needed**

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/589,594

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Input Set : A:\082368-008900US.txt  
Output Set: N:\CRF4\08282006\J589594.raw

61	acc	gca	ttg	ctt	gaa	cag	ctg	gaa	gag	aca	acg	aga	gaa	gga	gaa	agg		632
62	Thr	Ala	Leu	Leu	Glu	Gln	Leu	Glu	Glu	Thr	Thr	Arg	Glu	Gly	Glu	Arg		
63	100				105					110								
65	agg	gag	cag	gtg	ttg	aaa	gcc	tta	tct	gaa	gag	aaa	gac	gta	ttg	aaa		680
66	Arg	Glu	Gln	Val	Leu	Lys	Ala	Leu	Ser	Glu	Glu	Lys	Asp	Val	Leu	Lys		
67	115				120					125								
69	caa	cag	ttg	tct	gct	gca	acc	tca	cga	att	gct	gaa	ctt	gaa	agc	aaa		728
70	Gln	Gln	Leu	Ser	Ala	Ala	Thr	Ser	Arg	Ile	Ala	Glu	Leu	Glu	Ser	Lys		
71	130				135					140								145
73	acc	aat	aca	ctc	cgt	tta	tca	cag	act	gtg	gct	cca	aac	tgc	ttc	aac		776
74	Thr	Asn	Thr	Leu	Arg	Leu	Ser	Gln	Thr	Val	Ala	Pro	Asn	Cys	Phe	Asn		
75	150				155					160								
77	tca	tca	ata	aat	aat	att	cat	gaa	atg	gaa	ata	cag	ctg	aaa	gat	gct		824
78	Ser	Ser	Ile	Asn	Asn	Ile	His	Glu	Met	Glu	Ile	Gln	Leu	Lys	Asp	Ala		
79	165				170					175								
81	ctg	gag	aaa	aat	cag	cag	tgg	ctc	gtg	tat	gat	cag	cag	cg	gaa	gtc		872
82	Leu	Glu	Lys	Asn	Gln	Gln	Trp	Leu	Val	Tyr	Asp	Gln	Gln	Arg	Glu	Val		
83	180				185					190								
85	tat	gta	aaa	gga	ctt	tta	gca	aag	atc	ttt	gag	ttg	gaa	aag	aaa	acg		920
86	Tyr	Val	Lys	Gly	Leu	Leu	Ala	Lys	Ile	Phe	Glu	Leu	Glu	Lys	Thr			
87	195				200					205								
89	gaa	aca	gct	gct	cat	tca	ctc	cca	cag	cag	aca	aaa	aag	cct	gaa	tca		968
90	Glu	Thr	Ala	Ala	His	Ser	Leu	Pro	Gln	Gln	Thr	Lys	Lys	Pro	Glu	Ser		
91	210				215					220								225
93	gaa	gg	tat	ctt	caa	gaa	gag	aag	cag	aaa	tgt	tac	aac	gat	ctc	ttg		1016
94	Glu	Gly	Tyr	Leu	Gln	Glu	Glu	Lys	Gln	Lys	Cys	Tyr	Asn	Asp	Leu	Leu		
95	230				235					240								
97	gca	agt	gca	aaa	aaa	gat	ctt	gag	gtt	gaa	cga	caa	acc	ata	act	cag		1064
98	Ala	Ser	Ala	Lys	Lys	Asp	Leu	Glu	Val	Glu	Arg	Gln	Thr	Ile	Thr	Gln		
99	245				250					255								
101	ctg	agt	ttt	gaa	ctg	agt	gaa	ttt	cga	aga	aaa	tat	gaa	gaa	acc	caa		1112
102	Leu	Ser	Phe	Glu	Leu	Ser	Glu	Phe	Arg	Arg	Lys	Tyr	Glu	Glu	Thr	Gln		
103	260				265					270								
105	aaa	gaa	gtt	cac	aat	tta	aat	cag	ctg	ttg	tat	tca	caa	aga	agg	gca		1160
106	Lys	Glu	Val	His	Asn	Leu	Asn	Gln	Leu	Leu	Tyr	Ser	Gln	Arg	Arg	Ala		
107	275				280					285								
109	gat	gtg	caa	cat	ctg	gaa	gat	gat	agg	cat	aaa	aca	gag	aag	ata	caa		1208
110	Asp	Val	Gln	His	Leu	Glu	Asp	Asp	Arg	His	Lys	Thr	Glu	Lys	Ile	Gln		
111	290				295					300								305
113	aaa	ctc	agg	gaa	gag	aat	gat	att	gct	agg	gga	aaa	ctt	gaa	gag			1256
114	Lys	Leu	Arg	Glu	Glu	Asn	Asp	Ile	Ala	Arg	Gly	Lys	Leu	Glu	Glu			
115	310				315					320								
117	aag	aag	aga	tcc	gaa	gag	ctc	tta	tct	cag	gtc	cag	ttt	ctt	tac	aca		1304
118	Lys	Lys	Arg	Ser	Glu	Glu	Leu	Leu	Ser	Gln	Val	Gln	Phe	Leu	Tyr	Thr		
119	325				330					335								
121	tct	ctg	cta	aag	cag	caa	gaa	caa	aca	agg	gta	gct	ctg	ttg	gaa			1352
122	Ser	Leu	Leu	Lys	Gln	Gln	Glu	Glu	Gln	Thr	Arg	Val	Ala	Leu	Leu	Glu		
123	340				345					350								
125	caa	cag	atg	cag	gca	tgt	act	tta	gac	ttt	gaa	aat	gaa	aaa	ctc	gac		1400

RAW SEQUENCE LISTING  
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Input Set : A:\082368-008900US.txt  
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126 Gln Gln Met Gln Ala Cys Thr Leu Asp Phe Glu Asn Glu Lys Leu Asp		
127 355	360	365
129 cgt caa cat gtg cag cat caa ttg cat gta att ctt aag gag ctc cga		1448
130 Arg Gln His Val Gln His Gln Leu His Val Ile Leu Lys Glu Leu Arg		
131 370	375	380
133 aaa gca aga aat caa ata aca cag ttg gaa tcc ttg aaa cag ctt cat		1496
134 Lys Ala Arg Asn Gln Ile Thr Gln Leu Glu Ser Leu Lys Gln Leu His		
135 390	395	400
137 gag ttt gcc atc aca gag cca tta gtc act ttc caa gga gag act gaa		1544
138 Glu Phe Ala Ile Thr Glu Pro Leu Val Thr Phe Gln Gly Glu Thr Glu		
139 405	410	415
141 aac aga gaa aaa gtt gcc gcc tca cca aaa agt ccc act gct gca ctc		1592
142 Asn Arg Glu Lys Val Ala Ala Ser Pro Lys Ser Pro Thr Ala Ala Leu		
143 420	425	430
145 aat gaa agc ctg gtg gaa tgt ccc aag tgc aat ata cag tat cca gcc		1640
146 Asn Glu Ser Leu Val Glu Cys Pro Lys Cys Asn Ile Gln Tyr Pro Ala		
147 435	440	445
149 act gag cat cgc gat ctg ctt gtc cat gtg gaa tac tgt tca aag tag		1688
150 Thr Glu His Arg Asp Leu Leu Val His Val Glu Tyr Cys Ser Lys *		
151 450	455	460
153 caaaaataagt atttgttttg atattaaaag attcaataact gtatTTTCTG ttAGCTTGTG		1748
154 ggcattttga atttatattt tcacattttg cataaaaactg cctatctacc ttGACACTC		1808
155 cagcatgcta gtGAATCATG tatTTTTAG GCTGCTGTG atTTCTCTTG GCACTGATAc		1868
156 ctcccgtaca tgTTTcatca tcaggctgca atgacagaat gtggtagaca GCGCTACTG		1928
157 agactactaa cattttgcac tgtcaaaaat cttggtaggg aaaAGATAGC tcAGGTTATT		1988
158 gctaatgggt taatgcacca gcaagcaaaa tattttatgt ttTGGGGTT TGAaaaATCA		2048
159 aagataatta accaaggatc ttaactgtgt tcgcattttt tatCCAAGCA CTTAGAAAAC		2108
160 ctacaatcct aattttgtat tccattttta agaggtggtg atagatacta tttttttttt		2168
161 catattgtat agcggttatt agaaaagttt gggattttt tgaTTTTAT TGCTGCTTAC		2228
162 cattgaaact taacccagct gtgttccccca actctgttct ggcacacaaa cAGTATCTGT		2288
163 ttgaggcata atcttaagtg gccacacaca atgttttctc ttatgttac tggcAGTAAC		2348
164 tGtaacttga attacatttag cacattctgc ttAGCTAAAA ttGTTAAAAT aaACTTTAAT		2408
165 aaACCCATGT agccctctca tttgattgac agatTTTTAG ttatTTTTGG CATCTTAAA		2468
166 gctggcaat gtaatgatca gatTTTGTt tGCTGAACA ggtattttta tacatgctt		2528
167 ttgtaaacca aaaacttttca aatttcttca gttttctaa catgcttacc actgggctac		2588
168 tGtaaatgag aaaagaataa aattatttaa tGTTTT		2624
170 <210> SEQ ID NO: 2		
171 <211> LENGTH: 464		
172 <212> TYPE: PRT		
173 <213> ORGANISM: Homo sapiens		
175 <400> SEQUENCE: 2		
176 Met Ser Ser Arg Ser Thr Lys Asp Leu Ile Lys Ser Lys Trp Gly Ser		
177 1 5 10 15		
178 Lys Pro Ser Asn Ser Lys Ser Glu Thr Thr Leu Glu Lys Leu Lys Gly		
179 20 25 30		
180 Glu Ile Ala His Leu Lys Thr Ser Val Asp Glu Ile Thr Ser Gly Lys		
181 35 40 45		
182 Gly Lys Leu Thr Asp Lys Glu Arg His Arg Leu Leu Glu Lys Ile Arg		
183 50 55 60		

RAW SEQUENCE LISTING  
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184 Val Leu Glu Ala Glu Lys Glu Lys Asn Ala Tyr Gln Leu Thr Glu Lys  
 185 65 70 75 80  
 186 Asp Lys Glu Ile Gln Arg Leu Arg Asp Gln Leu Lys Ala Arg Tyr Ser  
 187 85 90 95  
 188 Thr Thr Ala Leu Leu Glu Gln Leu Glu Thr Thr Arg Glu Gly Glu  
 189 100 105 110  
 190 Arg Arg Glu Gln Val Leu Lys Ala Leu Ser Glu Glu Lys Asp Val Leu  
 191 115 120 125  
 192 Lys Gln Gln Leu Ser Ala Ala Thr Ser Arg Ile Ala Glu Leu Glu Ser  
 193 130 135 140  
 194 Lys Thr Asn Thr Leu Arg Leu Ser Gln Thr Val Ala Pro Asn Cys Phe  
 195 145 150 155 160  
 196 Asn Ser Ser Ile Asn Asn Ile His Glu Met Glu Ile Gln Leu Lys Asp  
 197 165 170 175  
 198 Ala Leu Glu Lys Asn Gln Gln Trp Leu Val Tyr Asp Gln Gln Arg Glu  
 199 180 185 190  
 200 Val Tyr Val Lys Gly Leu Leu Ala Lys Ile Phe Glu Leu Glu Lys Lys  
 201 195 200 205  
 202 Thr Glu Thr Ala Ala His Ser Leu Pro Gln Gln Thr Lys Lys Pro Glu  
 203 210 215 220  
 204 Ser Glu Gly Tyr Leu Gln Glu Glu Lys Gln Lys Cys Tyr Asn Asp Leu  
 205 225 230 235 240  
 206 Leu Ala Ser Ala Lys Lys Asp Leu Glu Val Glu Arg Gln Thr Ile Thr  
 207 245 250 255  
 208 Gln Leu Ser Phe Glu Leu Ser Glu Phe Arg Arg Lys Tyr Glu Glu Thr  
 209 260 265 270  
 210 Gln Lys Glu Val His Asn Leu Asn Gln Leu Leu Tyr Ser Gln Arg Arg  
 211 275 280 285  
 212 Ala Asp Val Gln His Leu Glu Asp Asp Arg His Lys Thr Glu Lys Ile  
 213 290 295 300  
 214 Gln Lys Leu Arg Glu Glu Asn Asp Ile Ala Arg Gly Lys Leu Glu Glu  
 215 305 310 315 320  
 216 Glu Lys Lys Arg Ser Glu Glu Leu Leu Ser Gln Val Gln Phe Leu Tyr  
 217 325 330 335  
 218 Thr Ser Leu Leu Lys Gln Gln Glu Glu Gln Thr Arg Val Ala Leu Leu  
 219 340 345 350  
 220 Glu Gln Gln Met Gln Ala Cys Thr Leu Asp Phe Glu Asn Glu Lys Leu  
 221 355 360 365  
 222 Asp Arg Gln His Val Gln His Val Ile Leu Lys Glu Leu  
 223 370 375 380  
 224 Arg Lys Ala Arg Asn Gln Ile Thr Gln Leu Glu Ser Leu Lys Gln Leu  
 225 385 390 395 400  
 226 His Glu Phe Ala Ile Thr Glu Pro Leu Val Thr Phe Gln Gly Glu Thr  
 227 405 410 415  
 228 Glu Asn Arg Glu Lys Val Ala Ala Ser Pro Lys Ser Pro Thr Ala Ala  
 229 420 425 430  
 230 Leu Asn Glu Ser Leu Val Glu Cys Pro Lys Cys Asn Ile Gln Tyr Pro  
 231 435 440 445  
 232 Ala Thr Glu His Arg Asp Leu Leu Val His Val Glu Tyr Cys Ser Lys

RAW SEQUENCE LISTING  
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Input Set : A:\082368-008900US.txt  
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233	450	455	460
236	<210> SEQ ID NO: 3		
237	<211> LENGTH: 22		
238	<212> TYPE: DNA		
239	<213> ORGANISM: Artificial Sequence		
241	<220> FEATURE:		
242	<223> OTHER INFORMATION: An artificially synthesized primer sequence for		
243	RT-PCR		
245	<400> SEQUENCE: 3		
246	acaacagcct caagatcatc ag		22
248	<210> SEQ ID NO: 4		
249	<211> LENGTH: 20		
250	<212> TYPE: DNA		
251	<213> ORGANISM: Artificial Sequence		
253	<220> FEATURE:		
254	<223> OTHER INFORMATION: An artificially synthesized primer sequence for		
255	RT-PCR		
257	<400> SEQUENCE: 4		
258	ggtccaccac tgacacgttg		20
260	<210> SEQ ID NO: 5		
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262	<212> TYPE: DNA		
263	<213> ORGANISM: Artificial Sequence		
265	<220> FEATURE:		
266	<223> OTHER INFORMATION: An artificially synthesized primer sequence for		
267	RT-PCR		
269	<400> SEQUENCE: 5		
270	agagatccga agagcttta tct		23
272	<210> SEQ ID NO: 6		
273	<211> LENGTH: 21		
274	<212> TYPE: DNA		
275	<213> ORGANISM: Artificial Sequence		
277	<220> FEATURE:		
278	<223> OTHER INFORMATION: An artificially synthesized primer sequence for		
279	RT-PCR		
281	<400> SEQUENCE: 6		
282	gatgctcagt ggctggatac t		21
284	<210> SEQ ID NO: 7		
285	<211> LENGTH: 24		
286	<212> TYPE: DNA		
287	<213> ORGANISM: Artificial Sequence		
289	<220> FEATURE:		
290	<223> OTHER INFORMATION: An artificially synthesized primer sequence for		
291	RT-PCR		
293	<400> SEQUENCE: 7		
294	cgtaaagcttc agagatgtct tcca		24
296	<210> SEQ ID NO: 8		
297	<211> LENGTH: 27		
298	<212> TYPE: DNA		

RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

se of n and/or Xaa have been detected in the Sequence Listing. Please review the  
Sequence Listing to ensure that a corresponding explanation is presented in the <220>  
& <223> fields of each sequence which presents at least one n or Xaa.

eq#:23; N Pos. 489,490,491,492

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/589,594

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Input Set : A:\082368-008900US.txt  
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:12 M:270 C: Current Application Number differs, Replaced Current Application No  
:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
:485 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:489 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23  
:498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:480

10/589,594

8

<210> 23  
<211> 5089  
<212> DNA  
<213> Artificial Sequence

<220>

<223> An artificially synthesized vector sequence

<221> misc\_feature

<222> (489)...(492)

<223> n = GAP

<400> 23

"n" can only represent a single nucleotide, nothing  
else